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THE TEN-HOUR SHIFT ON TRIAL
AT
BLANCHFIELD ARMY COMMUNITY HOSPITAL:
A STUDY OF STAFF NURSE PERCEPTIONS OF
THEIR JOB SATISFACTION

A GRADUATE RESEARCH PROJECT
SUBMITTED TO THE FACULTY OF
BAYLOR UNIVERSITY
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE
OF
MASTER OF HEALTH ADMINISTRATION
BY
MAJOR MARY BETH WEINHOLT JOHNSON, AND

31 JULY 1984

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supporting the trial on her unit and for her assistance in nurse scheduling. In addition, thanks to the nursing staff on the Labor and Delivery unit for completing a battery of questionnaires which may have seemed to no avail; to Captain Kevin Burbules for his advice and assistance in the computer support necessary for the statistical analysis of the data. A final and very special thanks to Lieutenant Colonel E. Lori Fletcher for her continued encouragement and inspiration, without which, many things could not have been accomplished.

DEDICATION

This project is dedicated to my husband, Bob. Without his love, understanding, support and sense of humor, I could not have completed this study.

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CHAPTER I

Introduction

Nurses comprise the second largest professional group of women in the United States and make up the largest occupational group among health care practitioners. As of November 1980, there were 1,616,846 registered nurses licensed to practice in the United States. Of that number, 1,235,152 were actively employed. Two thirds of those employed worked in hospitals.¹ While the number of employed nurses is impressive, in recent years two out of five nurses dropped out of the job market at some point in their careers.² This is particularly significant when one considers the economic impact of job turnover. Administrative costs involved constantly hiring and orienting new personnel thus increasing the burden of health care costs to the consumer. Other "costs" to the patient should also be considered: non-availability of replacement personnel and the learning time required for new nurses to reach peak efficiency contribute to a reduction in the quality of patient care.³

Turnover and dropout arise in part due to dissatisfaction with the job as a whole and with its components. Satisfied workers are not only more productive while in the job, but are also more likely to remain in their positions.⁴ Recent studies by McGillick (1983) have confirmed that satisfaction with their jobs does influence turnover rates among nurses. Additionally, some studies suggest that nursing turnover could be reduced by twenty-five to forty percent if the causes of job dissatisfaction were eliminated.⁵ Logically, if managers want their employees to work efficiently to fulfill their organizational goals, they must realize how much the working environments they supervise influence the worker's sense of satisfaction. Once pertinent satisfaction factors are identified and measured, managers can use them to study ways in which to improve morale, to change organizational policies and to review benefits and procedures which affect that particular group.⁶ Since personnel turnover results in additional costs to employers, and since the issue of the quality of patient care rendered is related to job satisfaction, and as military hospitals are by no means immune to the consequences of nurse dissatisfaction, examination of job satisfaction as a dependent variable is highly relevant.

Conditions Which Prompted The Study

Frelin (1983) examined personnel management issues for the Army Nurse Corps.⁷ This study appeared to

indicate widespread dissatisfaction in staffing and work scheduling throughout Army hospitals (i.e. scheduling standard eight-hour shifts utilizing a rotation basis). When asked what they would change if given the authority and opportunity, these nurses consistently reported that they would add more staff to present levels authorized and would substitute flexible, creative scheduling for that which is currently being used.

Program and Budget guidance for the coming fiscal years indicates that no additional resources will be allocated in the foreseeable future. Managers will be faced with an increasing workload, fewer resources and a concurrent requirement to reduce costs. In an April 1983 letter (Appendix A), Colonel Donald H. Triano, as Chief of Staff, Health Services Command (HSC), reported "organizations which have implemented self-scheduling programs and alternate work schedules (AWS) have experienced an increase in employee productivity and morale, and a decrease in tardiness, sick leave usage and turnover." Triano further urged hospital commanders to explore the use of alternate work schedules.

With the Federal Employees Flexible and Compressed Work Week Schedules Act of 1982 (PL97-221), Congress passed into law provisions for labor organizations to negotiate alternate work schedules unless the agencies involved could demonstrate adverse action impact such as reduced productivity, increased cost, or decreases in services

provided. This act extended the original law (PL5-390) which passed in 1978 for a three-year term.

Alternate work schedules have been utilized sporadically in a variety of work centers in Army Health Care facilities. At the onset of this study, there were twenty work centers under Health Services Command (HSC) utilizing some form of Alternate Work Schedule (AWS). Of those work centers utilizing the ten-hour day, all were either clinic areas (e.g. medical, dental), or service areas (e.g. patient appointment system, respiratory care, ambulance section, laboratory, nuclear medicine). Conspicuously absent from this list were work centers involved in direct patient care on a recurrent twenty-four-hour basis, i.e., nursing units. Alternate work schedule formats used by these work centers have previously been limited to the twelve-hour shift.⁸ Of the areas that have explored the use of this scheduling methodology, none have explored the effects of the alternate work schedules (AWS) on changes in perceptions of satisfaction.

A recent study by Kanzler and Satterwhite (1983) at Madigan Army Medical Center explored the effects of twelve-hour shifts which had been implemented to relieve a staffing crisis. As the authors were quick to point out, the study was limited by the fact that no pre-trial assessment data were available. The outcomes noted, however, were similar in nature to other studies;

specifically, there was a noticeable improvement in staff morale and job satisfaction. Additionally, 'most staff members felt the quality of care improved as they had more time to spend on direct patient care, family teaching, parental support, and to plan, evaluate, and individualize their nursing care."⁹

In view of the interest in alternate work schedules (aws) and the lack of documentation of changes in levels of job satisfaction, it seemed appropriate to examine the results of the implementation of an AWS in a military health care facility (Specifically, a patient care unit) so that nurse managers could consider this data when evaluating schedule designs for their particular units.

Hypothesis

Interest in investigating the effects of the alternate work schedule on perceptions of job satisfaction lead to the proposal of the following hypotheses: The implementation of an Alternate Work Schedule (the ten-hour day, four days per week/eighty hours per pay period, or the twelve-hour day/eighty hours per pay period) will have a positive effect on the perception of job satisfaction of registered nurses in a patient care unit at Florence A. Blanchfield Army Community Hospital, Fort Campbell, Kentucky.

Criteria

For the purpose of evaluating the outcome of this

research, the following criteria were operant: (1) Changes in Job and Schedule perceptions were considered significant and the $\alpha.10$ level as assessed by the JDI-type job satisfaction and schedule perception scales; and (2) Alternate work schedules employed were necessarily acceptable to hospital management.

Definition of Terms

The following definitions are applicable to this study:

Job Satisfaction: For the purpose of this study, job satisfaction will be considered to be positive or favorable feelings toward elements of the work environment dealing with working conditions, the amount of time available to accomplish duties, and the amount of time available for personal activities.

Alternate Work Schedule (AWS): Those work schedules which deviate from the standard eight-hour shift per day, five days per week, (or eight ten-hour shifts per two week pay period), or six twelve-hour shifts plus one eight-hour shift per two week pay period.

Assumptions

For the purposes of this study it was assumed that the following statements were valid: (1) The data producing instrument (questionnaire) was one which was reliable when used with nurses, (2) The needs of Blanchfield Army Community Hospital, or of the Department of the Army would not preclude completion of the AWS trial,

forcing the study to be abandoned, (3) Responses to the survey instrument (nurse questionnaire) were truthful, (4) Data collected from the samples was truly comparable and unbiased, and (5) Policy changes were not expected during the study period.

Limitations

Those limitations which were necessarily restricting included; (1) Only modified work schedules approved by hospital management and Civilian Personnel Office authorities could be included in the study; (2) Patient care units included in the AWS trial were limited to those with an adequate number of staff members to support the randomly selected AWS methodology. Those nursing units whose staffing could not support both the twelve-hour and ten-hour schedule methodologies were not eligible for participation in the study. Population mix was determined by the researcher rather than by hospital management; (3) The impact of extended shifts in other areas of the hospital or in other health care facilities was not explored. The present investigation compared levels of job satisfaction between professional nurses working standard shifts in the hospital environment only (specifically, in two specialty care areas); (4) Construct validity of the instrument has not been firmly established. No attempt was made to correlate levels of job satisfaction or dissatisfaction with turnover or absenteeism; (5) To solve this research problem, a long term, complete crossover

natural experiment would have been preferred. For practical, ethical and economic reasons, such comprehensive research was hardly feasible; (6) This investigation explored changes in levels of job satisfaction over a relatively short (eight weeks) period of time. Results did not involve the exploration of how these results might change over a long period of time; (7) Since employees were not "blind" to the study taking place, their responses might have been influenced by the "Hawthorne effect." This possibility could not be averted since the policy of this agency was such that participants in such a study must consent to their participation; (8) Subjects were not selected completely at random. It was necessary to select entire units from the small number of units available. Only two patient care units met the established staffing requirement; (9) Given the limitations of time and resources, and the lack of a practical, sensitive and valid direct observation tool, the decision was made to exclude quality of nursing services as a dependent variable in this study.

ENDNOTES

¹ Marietta P. Stanton, Judith A. Laughlin, and Charlene E. Wheeler, "Modifying Schedules Makes Jobs More Satisfying" Nursing Management 14: 12, (December 1983): p. 49.

² Ibid.

³ Jean Roy and Elaine Runge, "Flexi-hour Nurses," Nursing Management 14:9 (December 1983), p. 44.

⁴ Stanton, p. 49.

⁵ Ibid.

⁶ Gloria Jo Floyd, "A Job Profile: Psychiatric Nursing Aides," Nursing Management 14:9 (September 1983), p. 36.

⁷ A. J. Frelin, "Personnel Management Practices in the Army Nurse Corps," (publishing pending).

⁸ Joel Gray, Civilian Personnel Officer, Health Services Command, Fort Sam Houston, Texas, telephone conversation, September 1983.

⁹ Antoinette L. Kanzler and Janet L. Satterwhite, "A Nursing Study on the Alternate Work Schedule: The Twelve Hours Schedule," December 1982-April 1983. (mimeographed).

CHAPTER II

Review of the Literature

The first documented use of flexible work hours occurred at the Messerschmidt-Bolkow-Blohn Aerospace firm in Germany in 1968.¹ The potential benefits were determined to be: (a) a positive impact on employees' attitudes, (b) higher employee morale, (c) a general feeling of improvement by employees concerning the quality of life, (d) increased useable employee leisure time with no change in the work week, (e) reduced traffic problems, (f) reduced overtime costs, (g) reduced sick leave, (h) reduced tardiness, (i) reduced absenteeism, (j) increased communication between managers and subordinates, (k) improved employee receptivity to management requests increases (or at least stabilizes) productivity.

While numerous possible advantages were cited, some managers were also concerned about pitfalls which might be inherent in a program of this nature. Specifically, they feared that such programs might lead to: (a) disrupted production flow, (b) loss of management control, (c) lack of coordination in multi-shift operations, (d) longer

management hours, (e) lack of employee supervision during some periods, (f) deteriorated telephone coverage, (g) increased employee abuses, (h) less department cooperation.²

Many creative scheduling methodologies have been studied in the past twelve years. Each have been shown to possess many advantages for those who implemented them, usually offsetting the limitations which became evident. Ganong (1976), in a test of twelve-hour shifts, reported better utilization of nursing personnel which resulted in lower staffing requirements and in savings of payroll expenses. Other advantages included greater blocks of time off for nurses, improved morale, greater communication and continuity of care between physicians and nurses, and better patient relations. Additionally, benefits such as savings from reduced travel costs to work and lower child care costs while at work were noted.³ A study on twelve-hour shifts by Eaton (1980) showed a significant increase in the creativity scale, suggesting that the nursing staff felt less constricted in using their own methods of performing their duties, and that they felt more innovative and autonomous. Eaton also noted that the twelve-hour shift did increase satisfaction with the work environment, especially with regard to time available for leisure activities. This supports the work by Boyarski (1976), Ganong (1976), Stinson and Hazlett (1975), but contradicts the work of Hibbard (1972). Eaton also found

that sick time was not increased appreciably, supporting the theory that the health of the nursing staff had not deteriorated.⁴

Burroughs and Leslie (1972) reported the trial of the four-day week. Overtime decreased eighty percent in the Intensive Care Unit (ICU) during the trial period. Ninety-five percent of the respondents to a comprehensive survey questionnaire felt that the ten-hour schedule allowed them additional time for patient care planning and that it improved patient care. Many reported that the overlap provided more thorough communication and continuity between the shifts, extended the time for patient-centered conferences and staff development. Kellman (1983) found that by creating a longer period of shift change-over, more staff members were available at the busier moments in the day's activities to attend to each patient's needs. Patients could be ambulated more frequently, readied for meals more readily, and lights answered more quickly. By working together during the overlap, staff members' understanding of the problems of others were increased. Kellman, too, found that overtime hours were decreased.⁵ Hutchins and Cleveland found that for the hospital involved in their study, the turnover rate for the ten-hour shift nursing personnel averaged nine to ten percent annually contrasted to the twenty-five percent turnover rate for the eight-hour shift staff nurses.⁶

Extended shifts are not without some disadvantages. Kellman noted that there were scheduling problems due to the fact that the registered nurses required an additional day off. Ten-hour shifts are less acceptable when staffing is below manning table standards. Additionally, the ten-hour shift is not suitable to all employees for a variety of reasons, such as family or other obligations⁷; not every employee can remain at peak productivity during successive ten-hour days.⁸

Whether or not persons actively respond to their work environment, and are motivated to achieve higher levels of productivity is a function of the extent to which they perceive that these levels are within their own personal control. Employees who perceive that they have little control over their own productivity or work environment are more likely to "go through the motions" with minimal commitment or active involvement with their organization.⁹ Professional nurses need a type of schedule which allows them to balance personal and professional responsibilities. This fact should be obvious. Nurses want to maintain close family ties as well as social ties. They need these resources for personal satisfaction and to assist them in managing the stresses which their professional functions naturally entail.¹⁰

ENDNOTES

¹ Luis R. Gomez-Mejia, Michael A. Hopp, and Richard Sommerstad, "Implementation and Evaluation of Flexible Work Hours: A Case Study," *The Personnel Administrator* (January 1978), p. 39.

² Ibid, p. 40.

³ Warren L. Ganong, Joan M. Ganong, and Edwin T. Harrison, "The 12-Hour Shift: Better Quality, Lower Cost." *Journal of Nursing Administration* (February 1976), p. 25.

⁴ Philip Eaton and Susan Gottseleg, "Effects of Longer Hours, Shorter Week for Intensive Care Nurses." *Dimensions in Health Service*, (August 1980), p. 26.

⁵ Donna Kellman, "The Ten-Hour Schedule," *Nursing Management 14:2* (February 1983): 58, p. 61.

⁶ Marietta P. Stanton, Judith A. Laughlin, and Charlene E. Wheeler, "Do Extended Shifts Satisfy Nurses More?" *Nursing Management 14:10* (October 1983), p. 49.

⁷ Kellman, pp. 61-62.

⁸ John R. Turney and Stanley L. Cohen, "Alternative Work Schedules Increase Employee Satisfaction," *Personnel Journal* (March 1983), p. 202.

⁹ Ibid.

¹⁰ Kathleen McGillick, "Modifying Schedules Makes Jobs More Satisfying," *Nursing Management 14:12* (December 1983), p. 53.

CHAPTER III
Research Methodology

Purpose

The purpose of this study was to probe the question: Will the implementation of an Alternate Work Schedule have a positive effect on the perception of job satisfaction of registered nurses at Florence A. Blanchfield Army Community Hospital, Fort Campbell, Kentucky? The rest of this chapter describes the methodology for this quasi-experimental study. The research design, the sample, the data-producing instrument, the methods of procedure, protection of human subjects and methods of analysis are described.

Objectives

In order to accomplish this study, a multitude of intermediate tasks were necessary: (1) determining the feasibility of the study by attracting the interest of, and obtaining permission to conduct the study from the Chief, Department of Nursing, the Hospital Commander, and the Deputy Commander for Administration, Blanchfield Army Community Hospital (BACH); (2) gaining approval of Civilian

Personnel, Local Labor Union and Labor-Management relations officials; (3) gaining approval to utilize AWS formats to schedule Department of Nursing personnel from Health Services Command; (4) locating and augmenting a suitable data producing instrument; (5) obtaining adequate quantities of the data producing instrument; (6) determining the time frame during which to implement the AWS scheduling methodologies; (7) determining staffing requirements for three basic work schedule methodologies; (8) identifying patient care units with adequate numbers of nursing staff to support the various staffing methodologies; (9) assigning specific work schedule formats to specific patient care units using a random process; (10) implementing a trial AWS on a selected nursing unit at BACH during the period 8 January 1984 through 3 March 1984, a period of eight weeks; (11) determining the pre and post trial test dates of the nurse subjects; (12) measuring, using the JDI-type Schedule and Job Perception Scales, the effects of the AWS on perceptions of work schedule and job satisfaction during the trial period and again following an eight week resumption of the normal eight-hour day; (13) summarizing the results of the review and analysis and make recommendations regarding the use of AWS.

Research Design

The design of this study is quasi-experimental in nature. Quasi-experiments, while closely resembling an experiment, lack at least one of the three properties which

characterize a true experiment. The first effect is temporal: a cause must precede an effect in time. The second requirement is that there must be an empirical relationship between the presumed cause and the presumed effect. The third criterion in a causal relationship is that the relationship cannot be explained as being due to the influence of a third variable.¹ Through the controls imposed by manipulation, comparison, and randomization, alternative explanations to a causal interpretation can often be ruled out or discredited. The missing ingredient in this study was the absence of complete randomization. Complete randomization would have involved the random assignment of nurses to individual patient care units for the purposes of the study. This was hardly feasible when one considers the length of time it takes to orient a nurse transferred from one unit to another. In the interest of patient safety and quality of care, this process would have necessarily been accomplished over a period of months. Additionally, cross-training of nurses for the specialty care areas was not only infeasible, but undesirable, making it incongruous with the purpose of this study. Introducing added stressors into a group whose job satisfaction was to be studied would certainly be counterproductive.

Sample

The sample for this study consisted of registered nurses working in two specialty care units (Labor and Delivery, and Intensive Care) at Blanchfield Army Community

Hospital, and included both military officers and civilian nurses. These units were chosen because they were the only units which had enough nurses to operate under ten-hour shift scheduling. Six nurses are required for this scheduling methodology. The sample size was limited to twelve nurses; the number eligible to participate in the study on the two units.

Data Producing Instruments

During a search of the relevant literature, an instrument previously used by Jessup in his research on nurses' perceptions of their job schedules was discovered. This instrument was similar in format to the Job Descriptive Index (JDI) developed by Smith and associates (1969), which was intended to be used over a wide range of job classifications and with people of varying job level; to be short, easily administered and easily scored; to generate scores indicative of satisfaction with pay, work, supervision, co-workers, etc.; and to be free from obvious biases, reliable and valid. The developers used the JDI with over two thousand subjects in more than twenty different companies over a five-year period and concluded that the JDI adequately fulfilled the criteria for which it was designed (Smith, 1974). The internal consistencies of the five JDI scales range from .80 to .88. Researchers who have used the JDI for job satisfaction research with nurses also report similar internal consistency reliability scores.

The Pearson product-moment coefficient was the correlational statistic computed to reveal relationships between the two schedule perception scales used by Jessup, and the JDI and its subscales. Jessup found that the JDI-type Schedule perception scale (SPS) and the Likert type SPS correlated highly with each other and with the JDI ($r=.64$ $-.90$, $p=.001$). The relatively high correlation coefficient values of the subscales of the SPS with their major scale indicate that the subscales did indeed measure the concept under his investigation, schedule perceptions. Furthermore, the high correlation between the two Schedule Perception Scales (SPS), and the fact that both correlated equally with the Job Descriptive Index (JDI), indicated that either version of the SPS could be used in the future. Since there was such a high degree of correlation between the subscales of the SPS, Jessup revised and shortened the instrument and tested it for reliability using the responses obtained during further study. Additionally, Jessup suggested that the Schedule Perception scale (SPS) would be useful in studying the need for and the effects of staffing pattern changes in a particular institution. Inspired by Jessup's findings, his Revised JDI-type Schedule Perception Scale (SPS) was selected for use with a locally developed Job Satisfaction Scale. An additional section containing demographic data was also included in the data producing instrument.

The advantages of the revised JDI-type SPS over the JDI include: (1) its brevity (12 items in the SPS compared to 131 in the JDI), (2) its previous use with nurses and reported reliability when used with this group.

Methods of Procedure

The Chief, Department of Nursing, Blanchfield Army Community Hospital, was contacted informally to determine willingness to participate in the study. Nursing Section Chiefs were also consulted and informed that participation in the study was to be voluntary. A letter was developed to explain the purpose of the study to the Department of Nursing personnel working in patient care units. The purpose and format of proposed AWS was explained. A questionnaire developed to assess the overall acceptance/rejection atmosphere towards a study of Alternate Work Schedules (AWS) was prepared and distributed with the letter, to all Department of Nursing personnel on the patient care units (Appendix E).

Responses to questions of the preliminary survey indicated an overall interest in an AWS trial and a willingness to participate in such a trial. On the basis of the favorable responses, the decision to continue with the study was confirmed. Once permission to use the Schedule Perception Scale (SPS) was received from Major Jessup, ANC, (Appendix F), the SPS and a locally developed job satisfaction scale (JSS) were reproduced.

Job Satisfaction and Schedule Perception scales were initially distributed to all Department of Nursing personnel with the intent of establishing base line data. Unfortunately, as could be expected on the first iteration of a survey, the response rate was only twenty-two percent. In order to insure anonymity, nurses were asked to return the questionnaires unsigned. This made follow-up of non-respondents impractical. After conferring with the Chief, Department of Nursing, it was decided that data obtained from formal analysis of the questionnaires would be of limited value since it was possible that only those respondents who were very satisfied or very dissatisfied returned questionnaires, thus making true assessment difficult.

Two alternate schedule formats were considered for the study. Schedule patterns for each of the two schedule formats were developed. It was determined that at least six registered nurses were required for the ten-hour day format. Eight and twelve-hour shift formats could be implemented with five nurses. Due to constraints in staffing levels, only the Labor and Delivery Unit (L&D) and the Intensive Care Unit (ICU) were eligible to participate in the study. While this is certainly a limitation, it was felt that since both units were specialty areas, the similarities between the staffs of the two would contribute to the comparability of the two units. A toss of a fair coin determined that the ten-hour shift would be tested.

The selection of the Intensive Care Unit (ICU) as the study unit and the determination that the Labor and Delivery Unit (L&D) would be the control unit was also made by a toss of a fair coin.

Information packets containing detailed information on the proposed AWS included: (1) its purpose, (2) rationale, (3) its effect related to matters of pay, sick leave, holidays, etc., and (4) a consent form specifying their voluntary participation, expected activities during the trial, and indication of willingness to participate in the trial during specific dates, were distributed to all personnel on the study unit (Appendix G). A different information packet and consent form was distributed to the control unit since participation involved different activities; specifically, completing the JSS and SPS every two months for a total of three iterations (Appendix H). Since all of the nurses on the study and control units agreed to participate in the trial ten-hour shift, no special arrangements were necessary. Arrangements had been made to allow those who were not to participate in the study to continue to work the routine eight-hour shift on the parent unit.

The time frame selected for the AWS trial had to allow for the accomplishments of the intermediate tasks while satisfying requirements determined by the design of the study. In order to avoid further complication of the time and attendance records, and to avoid conducting the

study during a time which might ordinarily be associated with great emotional connotations, it was determined that avoidance of the Thanksgiving and Christmas holiday periods was both desirable and necessary. Consideration was also given to the fact that the absence of staff members taking personal leaves during these periods would contribute to staffing problems and, therefore, adversely affect the study. Operating within these parameters, and considering target completion date for the study, the study period dates were set for January 1984 through April 1984. This period included the actual trial AWS period, January 8, 1984 through March 3, 1984, and posttrial observation period which lasted until April 28, 1984.

Distribution of the JDI-type Job Satisfaction and Schedule Perception Scales (JSS and SPS) occurred during the first week of January 1984. Each person on the "study" and "control" units received a questionnaire even though the paraprofessional personnel were not to participate in the study. A number was assigned to each participant to monitor return of the survey while still maintaining anonymity. Completed questionnaires were unsigned and returned to the researcher using the in-house mail distribution system. Reminders were sent to those participants who initially failed to respond. The eventual response rate for the first iteration of the questionnaire was one-hundred percent.

Implementation of the AWS in the study unit occurred as planned on 8 January 1984. The distribution of the schedule consisted of a bi-weekly eighty-hour work schedule. The head nurse of the unit continued to work the conventional five-day week in order to coordinate shift changeover, planning, and other administrative responsibilities. The head nurse was also responsible for developing schedules within the guidelines of the study protocol. This schedule format continued for eight weeks. The survey instrument was again distributed to all participants during the last week of the trial. One nurse on the study unit terminated employment during the trial period due to responsibilities involved with school. With the exception of this nurse, the response rate was one-hundred percent, following the same procedure as the first iteration of the questionnaire.

Nurses on the study reverted to the eight-hour shift on 4 March and continued to work this schedule format thereafter. The nurses were again surveyed with the JSS/SPS after they had been on the eight-hour shift for eight weeks. During this period one nurse on the control unit was transferred to another area of the hospital and was therefore deleted from the study. Following the procedure established in the first two iterations of the survey, all questionnaires were returned to the researcher.

At the completion of the study period, nurses on the study unit (ICU) were interviewed in order to gain

additional information regarding reactions to the AWS trial.

The dependent variable in the study was nurse job satisfaction, and was measured by the JSS/SPS. Consideration was also given to the examination of other dependint variables, such as physiologic and intellectual effects of extended work hours, and quality of care issues, but these were not included in the design because the investigator regarded those areas of inquiry as too loosely developed as yet to serve as valid indicators in short run research. Additionally, an adequate tool by which to measure these variables was not available.

Protection of Human Subjects

While it was not possible to conduct this study and maintain complete anonymity of the subjects, completed questionnaires were returned unsigned and were inaccessible to all but the nurse researcher. Risk to the individual was minimal due to the nature of the study, the subject matter of the questionnaire, and voluntary participation in the study. Individual responses were expressed in summary form so that individuals could not be identified.

Methods of Analysis

After the data were collected, the questionnaires were scored, yielding a "satisfaction score". Positive reactions received three points; questions marked undecided or which were left unanswered were awarded one point. Negative reactions were awarded no points. Scoring in this

fashion was done to maintain consistence with the original scoring used by Jessup. When "yes" answers were assigned three points, undecided 2 points, and no answers one point, the overall results were not significantly different. The net results (increases/decreases) were similar in both scoring methods. Those scores which were highest in numerical value were also those which displayed the greatest satisfaction toward factors relating to the items on the questionnaire. Once scored, baseline scores were compared to the second iteration of the questionnaire in both the study group and the control unit. Scores from the third iteration of the questionnaire were compared to the second iteration. Increases and decreases in "satisfaction scores" of each scheduling methodology were tallied and analyzed.

ENDNOTE

¹Denise Polit and Bernadette Hungler, Nursing Research: Principles and Methods, 2nd ed., (Philadelphia and Toronto: J.B. Lippincott Company, 1983), p. 152.

CHAPTER IV

Presentation and Analysis of Data

The purpose of this study was to examine the relationship between job satisfaction and the implementation of an Alternate Work Schedule (AWS). This chapter is a presentation of data obtained from debriefing interviews with registered nurses in the study group and from questionnaires returned by registered nurses in both the control and study units.

Tables 1 and 2 display the raw scores of each of the respondents, listed in random respondent order so that anonymity may be maintained. When evaluating the scores on the combined scales, three respondents in group A had increases in satisfaction, scores of ten or more points. One of the three had an increase of thirty points. Table 3 displays an analysis of the number of nurses in the study group and the control group who demonstrated increases in job satisfaction versus the number of nurses that did not demonstrate an increase in satisfaction as determined by the various scales. In each case the individual's score during the eighth week of the study was compared to

TABLE 1
RAW SCORES
CONTROL GROUP: EIGHT-HOUR SHIFT

Question #	Job Satisfaction												Schedule Perception												Total JS	Total SP	Combined
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	36	37	38
A	3	3	3	0	0	3	3	3	0	0	0	0	3	3	0	3	3	0	3	3	0	3	3	0	18	24	42
B	3	0	3	1	3	0	3	3	1	1	1	1	3	0	0	0	3	0	0	3	3	3	0	0	16	15	31
C	3	3	3	1	0	3	3	3	0	0	3	0	3	3	0	0	3	0	3	3	0	3	3	0	22	21	43
A	1	0	0	0	1	3	3	3	1	0	1	0	1	3	0	0	1	0	3	3	0	1	3	0	13	15	28
B	0	0	0	0	0	0	3	3	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	6	6	12
C	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	3	3	0	0	3	0	6	9	15
A	1	0	3	3	1	3	3	3	3	3	3	3	0	3	0	3	0	0	0	3	1	3	0	0	29	13	42
B	1	0	3	3	3	3	3	3	3	1	3	3	0	3	0	1	3	0	1	3	3	1	1	0	29	16	45
C	1	0	3	1	3	1	3	3	0	1	3	1	1	3	1	3	1	0	1	3	3	3	1	0	20	19	39
A	3	0	0	0	3	3	3	3	0	1	0	0	3	3	0	0	3	0	3	3	0	3	3	0	16	21	37
B	3	0	3	0	3	3	3	3	0	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	21	3	24
C	0	0	0	0	3	3	3	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	15
A	3	0	0	0	0	0	1	3	0	1	3	0	3	3	0	3	3	0	0	3	0	3	0	0	11	18	29
B	3	0	3	1	1	0	3	3	0	1	3	1	3	3	3	3	3	0	1	3	0	0	1	0	19	20	39
C	3	3	0	3	3	3	3	3	0	3	3	0	3	3	0	3	3	0	3	3	0	3	3	0	27	24	51
A	3	3	3	3	3	1	3	3	3	3	3	0	3	3	0	3	3	0	3	3	3	3	3	0	31	27	58
B	3	1	3	3	3	1	3	3	1	0	3	0	3	3	0	0	3	3	3	3	0	3	3	0	24	24	48
C	TRANSFERRED FROM UNIT																										

Code: A = Base Line Score
 B = Scores from testing at eighth week of study
 C = Scores at sixteenth week of study
 JS = Job Satisfaction
 SP = Schedule Perception

TABLE 2
RAW SCORES
STUDY GROUP: TEN-HOUR SHIFT

TABLE 2																												Total JS	Total SP	Combined
STUDY GROUP: TEN-HOUR SHIFT																														
Job Satisfaction														Schedule Perception																
Question #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	36	37	38			
A	3	3	3	3	3	3	3	3	3	0	3	3	3	3	3	0	3	3	3	3	3	3	3	3	33	33	66			
B	3	3	3	3	3	3	3	3	3	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	33	36	69			
C	3	1	3	3	3	3	3	3	3	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	32	36	68			
A	3	1	1	3	3	3	3	3	3	3	3	3	0	3	0	0	0	0	0	0	0	0	1	1	0	32	5	37		
B	3	3	3	3	3	3	3	3	3	1	3	3	1	1	1	0	0	3	0	1	3	0	3	3	1	32	15	47		
C	3	3	3	1	3	3	3	3	3	1	1	3	3	3	3	1	1	1	1	0	1	0	1	1	1	30	14	44		
A	0	3	3	0	1	3	0	3	0	0	3	0	3	3	0	3	1	1	1	3	0	3	1	0	16	19	35			
B	0	1	3	0	1	3	1	3	0	3	3	0	0	3	0	1	0	3	3	3	0	3	3	1	18	20	38			
C	1	3	3	3	3	3	1	3	3	3	3	0	3	3	0	0	3	0	0	3	0	3	0	0	29	15	44			
A	3	0	3	3	3	0	3	0	0	3	3	0	0	0	3	3	0	3	0	3	0	0	0	3	21	15	36			
B	3	0	3	3	3	3	3	3	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	30	36	66			
C	0	0	3	3	3	3	3	3	0	3	3	3	0	3	0	0	0	3	3	3	0	3	3	3	27	21	48			
A	1	1	3	3	3	3	3	3	3	1	3	3	1	1	1	0	1	3	1	1	0	1	1	3	30	14	44			
B	3	1	3	3	3	1	3	3	3	3	3	3	1	3	3	0	1	3	3	3	1	3	3	3	32	27	59			
C	1	3	3	3	1	3	3	3	3	3	3	3	3	3	3	3	3	3	1	3	1	3	3	3	32	32	64			

Code: A = Base Line Score
 B = Scores from testing at eighth week of study
 C = Scores at sixteenth week of study
 JS = Job Satisfaction
 SP = Schedule Perception

TABLE 3

TOTAL NUMBER OF RESPONDENTS IN EACH CATEGORY
DEMONSTRATING INCREASED SATISFACTION

Job Satisfaction Scale				
Eight-Hour Shift	Number of Persons	INCREASE	NO INCREASE	TOTAL
		2	4	6
Eight-Hour Shift	Percent of Total	33%	66%	100%
Ten-Hour Shift	Number of Persons	3	2	5
	Percent of Total	60%	40%	100%

Schedule Perception Scale				
Eight-Hour Shift	Number of Persons	INCREASE	NO INCREASE	TOTAL
		2	4	6
Eight-Hour Shift	Percent of Total	33%	66%	100%
Ten-Hour Shift	Number of Persons	5	0	5
	Percent of Total	100%	0	100%

Combined Scales				
Eight-Hour Shift	Number of Persons	INCREASE	NO INCREASE	TOTAL
		2	4	6
Eight-Hour Shift	Percent of Total	33%	66%	100%
Ten-Hour Shift	Number of Persons	5	0	5
	Percent of Total	100%	0	100%

baseline data. Among the six control group respondents, thirty-three percent demonstrated an increase in satisfaction compared to sixty-six in the study group as indicated by the job perception scale. When using the Schedule Perception Scale or a combination of the two scales, thirty-three percent of the control group demonstrated an increase in job satisfaction compared to one-hundred percent of the study group.

The question remained, what was source of the increase in satisfaction? Could the source of the percentage point differences simply have been the expected sampling variation which might occur in a small sample? Suppose a relationship was found in cross-classified sample data. It cannot necessarily be assumed that there exists a corresponding bivariate relationship in the population. The cause of the sample relationship could merely be sampling variability. In other words, the sampling relationship could be a fluke which would disappear if the entire population was considered. Recognizing this, a method must be sought through which an inferential statement about the population relationship can be made.¹

Fishers Exact Test

In order to determine the significance of the reported values, the Fishers exact test was used to test the hypothesis:

H_0 : No relationship exists between the implementation of an Alternate Work Schedule format and increased job satisfaction.

H_a : The implementation of an Alternate Work Schedule format is associated with increased job satisfaction.

8-hour	4 ^a	2	6 = A
10-hour	0 ^b	5	5 = B

Since b , the smallest value observed, is zero, and the critical value for b at the .05 level is also zero, the null hypothesis can be rejected. The P value is .045. It may be said, therefore, that there is a positive relationship between the implementation of the ten-hour AWS and an increase in job satisfaction of intensive care nurses at the Colonel Florence A. Blanchfield Army Community Hospital.

ENDNOTE

¹Wayne W. Daniel, Applied Non-parametric Statistics, Houghton-Mifflin Co., Boston, 1978.

CHAPTER V

Discussion and Interpretation of Data

The purpose of this study was to examine the relationship between job satisfaction and the implementation of an Alternate Work Schedule (AWS). Four aspects of scheduling (coverage, stability, flexibility, and acceptability) were examined collectively. This chapter is a presentation of data obtained from debriefing interviews with registered nurses in the study group and from questionnaires returned by registered nurses in both the control and study units.

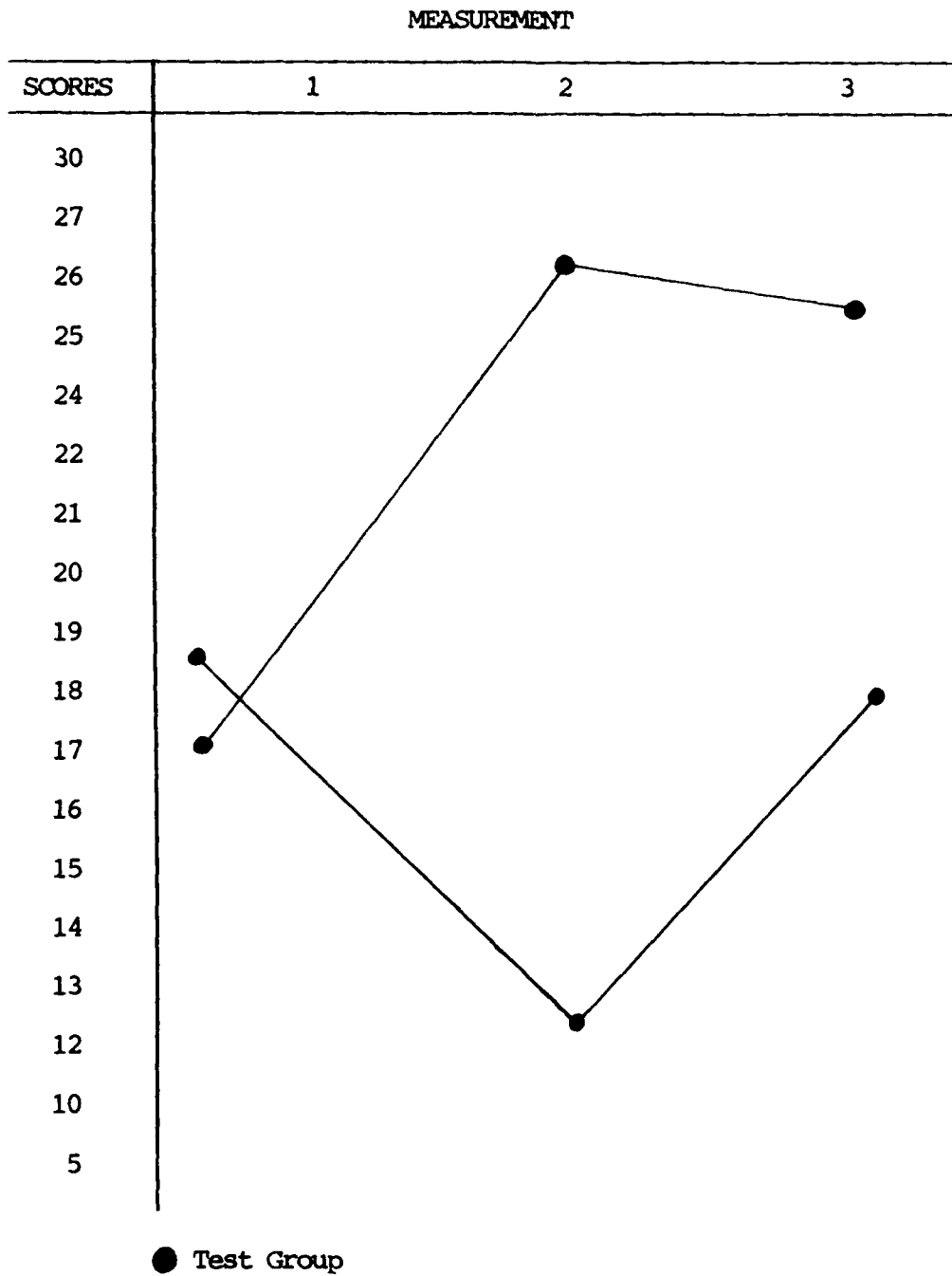
Interpretation of Statistical Analyses

The Fishers exact test yielded evidence of significance. Evidence exists that there was a significant difference in the test group and the control group following the schedule manipulation which took place. Was this difference produced by the schedule manipulation? This cannot necessarily be assumed since at the time of the increase in scores of the test group (increased satisfaction), there was an equal depression of the scores of the control group. Was this decrease in scores

artificial? Did something happen in the Department of Nursing which caused an overall decrease in satisfaction? If something did occur (i.e., staffing problems, change in management policies, etc.), why was the test unit not affected? Was the new schedule such a satisfier that it was able to dilute the negative effects of those elements which affected other Department of Nursing personnel? Or, was the control group dissatisfied because they were aware that a new schedule methodology was being implemented, but they were not able to participate in the trial?

The question must also be asked: Would any schedule manipulation have caused an increase in satisfaction simply because it was different? Table 4 displays a plot of the satisfaction scores of the two groups. The pattern of change closely approximates that which is commonly found in the phenomenon known as positive reinforcement contrast.¹ If you take two groups who are receiving approximately the same benefit for the same work, then increase the benefits of one group, the other will perceive their benefits as being reduced. On the other hand, assume that you have two groups who are receiving different benefit packages, one higher than the other. If you increase the benefits of the lower benefit group to a level equal to the group which originally had the higher benefit package, the group which had the lower benefit package to begin with will increase productivity because they perceive their situation to be improved. This increased rate of productivity will

TABLE 4

Pattern of Change of Test and Control Groups

eventually taper off, but it will not return completely to the pre-change level. This is exactly what happened in this experiment. The Intensive Care Unit nurses perceived their benefits and their perception of satisfaction increased. The Labor and Delivery nurses perceived that while another unit was being rewarded, they were not; they demonstrated an apparent decrease in satisfaction. The management question here is: Could productivity and job satisfaction be increased by periodic schedule or other benefit manipulation? How much manipulation, what kind and how frequently must it occur to sustain productivity and satisfaction? Is this feasible? Would the benefits actually outweigh the costs to the organization?

Discussion of Interview and Descriptive Data

Examination of the raw data reveals some interesting but not particularly surprising effects of the ten-hour alternate work schedule. In the study group, all of the staff nurses who worked the extended shift (this included all of the staff nurses but excluded the head nurse and assistant head nurse), exhibited an increase in overall satisfaction scores as measured by the revised job and schedule perception scales. The increases varied from three to thirty points, with a mean increase of 12.2 points.

The head nurse was the only professional nurse who did not exhibit an increase in satisfaction. This is not surprising since neither the head nurse nor the assistant

head nurse were able to work the extended shifts, yet were responsible for insuring the coordination of care in a unit whose professional staff and paraprofessional staffmembers were on overlapping schedules. Since there were not enough paraprofessional staff members to staff the unit on the ten-hour shift format, they continued to work the eight-hour shift format. This presented some added confusion and lack of continuity. Multiple "change of shift" reports were necessary. The design of the study stipulated that the head nurse would continue working the eight-hour shift in order to handle administrative duties inherent in the head nurse position. When it was determined that it would be necessary for the head nurse to be absent from the work area for a major portion of the study period, it also became necessary for the assistant head nurse to work the eight-hour shift in order to assume the head nurse responsibilities. While they bore the brunt of the scheduling headaches and coordination problems during the trial, the head nurses were not allowed to enjoy the personal advantages of the ten-hour shift, i.e., the extra day off each week. Other complications stemmed from the fact that the trial period occurred during a period of staffing problems: in addition to being generally shoft staffed, a new nurse was being oriented to the unit; it was necessary for the head nurse to be absent from duty for four to five weeks; and another nurse quit work due to added responsibilities involved in school work.

Each of the members of the study group were debriefed at the end of the study period. When asked if they liked the ten-hour shift, six out of seven nurses (85.7 percent) replied "yes". When asked if they would opt to return to the ten-hour shift, four out of seven (57.1 percent) gave an unqualified "yes" reply, and two out of seven (28.5 percent) gave a qualified "yes, if the whole staff could be on the same shift and if staffing was adequate to support the schedule more easily". One respondent said "maybe". Extra time off was cited as the main advantage by six out of the seven nurses on the test unit. Other comments included the fact that they were often there for more than eight hours when things were hectic anyway. The overlap of staff was helpful since there was additional registered nurse coverage while the oncoming shift made patient rounds and checked patient records, and since questions which arose after patient records were checked could be clarified with the soon-to-depart staff members. Also reported as an advantage was the fact that the staff seemed to get the additional rest they needed. Another nurse felt that fewer people would ask for additional unscheduled time off or call in sick if the ten-hour shift could be retained, and if a nurse knew that extra scheduled time off was available, less unscheduled time off would be necessary. Advantages from the point of view of the head nurses stemmed from the fact that since the rest of the staff did seem generally more satisfied during the trial

period, this contributed to their satisfaction.

Aspects the staff did not like included the fact that the entire staff was not able to participate in the ten-hour shift trial. Four out of seven (fifty-seven percent) cited this as a disadvantage when queried independently. The other negative aspect centered around the night shift hours. The two hour overlap of the night shift with the day shift was felt to be excessive and, therefore, a disadvantage. The three nurses who cited this as a problem felt that a one-hour overlap was sufficient in the morning and that the overlap would be better utilized during the evening hours when staffing was shorter.

Fatigue is reported to be a possible disadvantage in some extended shift schedules. However, Davis (1982) found that fatigue experienced in long stretches of eight-hour shifts was greater than that associated with even twelve-hour shifts!² Fatigue was not cited as being a significant problem in this study, however. One nurse who worked night shift reported that while the timing of the night shift made the shift seem too long since her services were not needed after eight a.m., she did not actually experience more fatigue in general.

When asked if they generally felt more overall job satisfaction during the trial period, four out of seven nurses replied "yes," one nurse felt there had been no change, one nurse replied "no," and one stated that the staff in general seemed content and that the schedule

worked well during busy times. Of those who replied "yes" to this question, two also added that the satisfaction was related to the extra time off. One nurse added that there was more time to get everything done at work. In order to assess the magnitude of other factors which could have occurred during the trial period and contributed to the increased satisfaction, the staff was asked to mention any factors which could have contributed to their level of satisfaction. Three out of seven could not think of any factors which could have contributed to their level of satisfaction. One of these three nurses scored the biggest increase in the level of satisfaction (thirty points). While two factors mentioned by one nurse occurred during this period, these factors were not mentioned by any of the other nurses. Another nurse cited two other factors: (1) a change in management policies on the unit added more structure and relieved the nurses from some decision-making and (2) the ten-hour shift was regarded by some as a reward for the hard work they had been doing, and made the nurses feel that someone cared and was looking out for their best interests.

Staff members were not the only ones who liked the study. Supervisors and other head nurses have expressed an interest in the ten-hour shift schedule. This alternate scheduling format is currently being considered for future implementation on selected nursing units at Blanchfield Army Community Hospital. It has been shown that where

staffing is adequate, the ten-hour shift can work in a military setting.

ENDNOTES

¹ Interview with Anthony Golden, Ph.D., Assistant Professor of Psychology, Austin Peay State University, Clarksville, Tennessee, 8 June 1984.

² C. Davis, "Evaluating the 12-hour shift schedule," Dimensions in Health Services 59:6 (June 1982), p. 32.

CHAPTER VI

Summary, Conclusions, Implications, and Recommendations

Summary

The purpose of this study was to examine the relationship between the implementation of an alternate work schedule and perceptions of job satisfaction. Twelve registered nurses from two specialty care units at Blanchfield Army Community Hospital participated in a study which examined the effects of ten-hour shifts. During this trial period six nurses on the Labor and Delivery Unit served as the "control" by continuing to work the usual eight-hour shift. Six nurses on the Intensive Care Unit worked a schedule which implemented ten-hour shifts. Perceptions of job satisfaction and work schedules were measured three times. Perceptions were measured immediately prior to the start of the ten-hour schedule trial, after the study unit had been on the new schedule for eight weeks and again after they had reverted to the usual eight-hour schedule format.

The data producing instrument requested the nurses to respond to a series of statements about their job and work

schedules by indicating whether they agreed with the statement, disagreed with the statement, or could not decide. Structured interviews with nurses on the study unit probed for answers to questions which were not specifically covered by the questionnaire and which applied only to the ten-hour shift and in general terms.

Conclusions

The following conclusions may be drawn from this study of the ten-hour shift:

1. The nurses were willing to experiment with a new scheduling format.

2. Nurses who took part in the ten-hour shift trial expressed overall satisfaction with this scheduling modality. Most of these nurses would like to go back to this format if the entire staff could be included.

3. Implementation of a ten-hour schedule format appeared to increase overall job satisfaction in the nurses who tried it, i.e., schedule patterns do relate to job satisfaction.

Implications and Recommendations

This study explored the perceptions of nurses about their job satisfaction during the first known trial of the ten-hour shift in a patient care unit located in an Army Health Care Facility. The fact that schedule patterns do appear to relate to job satisfaction is certainly germane. Since greater satisfaction was found with the ten-hour shift, nurse managers should consider utilizing this

schedule format when possible, in order to increase overall job satisfaction levels. Alternate work schedules should be further examined with a view to extending their use. Further investigation should be carried out: (1) with a larger sample, (2) with paraprofessional personnel as well as with professional staff members, (3) in more than one hospital and more than just specialty care areas, and (4) for longer periods of time since the effects of long-term extended shifts on nurses in military hospitals is incompletely documented and assessed. It is also recommended that future studies with larger samples examine the effects of specific demographic characteristics. Quality of care indicators, staff turnover rates and absenteeism should be examined conjointly with perceptions of job satisfaction. It is further recommended that nurse managers involve staff nurses from the beginning, when schedule manipulations are considered, for there is evidence to suggest that greater success can be achieved when nurses are encouraged to participate in these policy decisions.

APPENDIX A

LETTER: COLONEL DONALD H. TRIANO, MSC



DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY HEALTH SERVICES COMMAND
FORT SAM HOUSTON, TEXAS 78234

REPLY TO
ATTENTION OF:

S: 29 April 1983

HSPE-CS

25 MAR 1983

SUBJECT: Alternatives to Meet Nursing and Ancillary Support Requirements

Commanders
HSC Activities

1. Reference:

a. Letter, HSPE-CM, HQ HSC, 12 October 1982, subject: Civilian Personnel Management Program, FY 83-85+.

b. DA Circular 690-82-3, Civilian Personnel Management Program FY 83-85+, 1 December 1982.

c. Letter, HSPE-CM, HQ HSC, 8 September 1983, subject: Continuation of Alternative Work Schedules.

2. Program and budget guidance for the coming fiscal years indicates that no additional resources will be allocated in the foreseeable future. Managers will be faced with an increasing workload with fewer resources and a concurrent requirement to reduce costs. Costs in certain areas (i.e., CHAMPUS) have continued to escalate and must be reduced. With these goals in mind, we are exploring many possibilities.

3. References a and b identify priority goals, areas of special emphasis, support actions, and prescribe operating program objectives to assist commanders in managing the Army's civilian work force. Among the objectives in reference b is a ratio of 1:80 part-time career employees to full-time career employees in the US. Maximum use of part-time career employees will not only provide improved employment opportunities and representation in the workforce for special groups, but may also be a valuable tool for keeping units fully staffed with personnel with the needed skills. In reference c, all HSC activities were advised of existing authority to use flexibilities in scheduling work days and weeks. Organizations which have implemented self-scheduling programs and alternative work schedules (AWS) have experienced an increase in employee productivity and morale, and a decrease in tardiness, sick leave usage, and turnover. Commanders should explore the use of self-scheduling concepts and AWS, specifically flexible or compressed work schedules, since the advantages cited above could provide assistance in accomplishing the requirement for doing more with less.

HSPE-CS

28 MAR 1983

SUBJECT: Alternatives to Meet Nursing and Ancillary Support Requirements

4. The use of incentives to reward good work has also proven to be effective in improving morale and reducing turnover. Numerous studies have shown it is considerably more cost effective to initiate positive actions to retain critical employees such as nurses than to undergo nonproductive periods while recruiting and training replacements. Reviews of award nominations indicate that nurses, as a group, receive less recognition than any other comparable occupational category. This absence of recognition has been identified as one of several factors which contribute to an exceptionally high turnover rate. While we recognize that, historically, nurses are a somewhat mobile group, an effective recognition program could serve to reduce turnover. Recognition programs need not always involve monetary awards. A "Nurse of the Month" or "Nurse of the Year" program, with peer group involvement in the selection process, has proven to work well. Peer group involvement is important since the desired effect can only be achieved if the recognition goes to those respected by the group. Recognition of both clinical and administrative skills should be emphasized.

5. Reduction of injury compensation costs by 5 percent from the FY 1982 level and reduction of average sick leave use for US citizen employees by 5 percent from FY 1982 levels are operating objectives which, if substantially met, will have tangible results in terms of savings, cost avoidance, and increased productivity. Your annual leave policies should also be reviewed to determine if leave is being approved and used in a prudent manner such as assuring full coverage during peak times and scheduling leave during periods when employees' services can best be spared.

6. Improved performance management is needed in many areas, including development and use of sound performance standards that enable management to encourage and measure productivity improvements, efficiencies and cost savings. Greater emphasis on military and civilian suggestions which reduce costs or produce greater efficiencies is also an area where increased management involvement and support may produce the desired results.

7. Another area for consideration is the possible use of nursing pools established through the use of Intermittent (WAE) Appointments to cover peak workloads or fluctuations in workloads. In order to determine the feasibility of this approach, request you consult with your servicing civilian personnel office (CPO) and make a determination of the number of nurses available for intermittent employment in your area and provide that information to HQ HSC, ATTN: HSPE-CS by 29 April 1983. The use of overtime (OT) on a recurring basis is another possibility. The judicious use of overtime can be very cost effective if it precludes hiring additional employees and the loss of efficiency due to fatigue. Using overtime in lieu of hiring temporary employees generates no additional leave costs, no additional benefit costs, no requirement for additional support personnel and there is no loss in productivity during an orientation phase.

26 MAR 1983

HSPE-CS

SUBJECT: Alternatives to Meet Nursing and Ancillary Support Requirements

8. Managers will be challenged to accomplish their missions within the constraints dictated by these budgetary decisions and innovative personnel management practices will be required. Future planning should take into consideration the expectation that workload will increase while you are striving toward a goal to reduce your cost per patient. This can only be accomplished through increased productivity and efficiency.

9. Comments on alternatives considered or employed should be reported to HQ HSC, ATTN: HSPE-C, within 30 days of receipt of this letter. POC is Mr. Glen Olson, AUTOVON 471-6631.

FOR THE COMMANDER:



DONALD H. TRIANO
Colonel, MSC
Chief of Staff

APPENDIX B

APPROVAL OF AWS TRIAL FROM LABOR/MANAGEMENT



53

DEPARTMENT OF THE ARMY
HEADQUARTERS 101ST AIRBORNE DIVISION (AIR ASSAULT) AND FORT CAMPBELL
FORT CAMPBELL, KENTUCKY 42223

REPLY TO
ATTENTION OF:

December 7, 1983

Office of Civilian Personnel

REC'D DEC 9 1983

Mr. Marvin C. Wallace
President, American Federation of
Government Employees Local 2022
Post Office Box 3
Fort Campbell, Kentucky 42223

Dear Mr. Wallace:

An Alternative Work Schedule Plan/Compressed Work Week for the Intensive Care Unit, Blanchfield Hospital, is enclosed for your review/comments and/or agreement.

The initial plan is to establish a two-month trial period beginning in early January 1984. The plan (see page 2) includes both military and civilian employees, both professional and nonprofessional.

Request I be informed on/before 16 December 1983 of your agreement with the plan. Please ask me to help you with any question you may have about the plan.

Sincerely,

Robert E. Gooch
Labor Relations Officer

Enclosure

CONCUR - Mr. Wallace —

Rec'd CPD 19 Dec 83 -

& informed Maj. Johnson (8048)

APPENDIX C

APPROVAL OF AWS TRIAL FROM HSC

HSFE-CM (1 Dec 83) 1st Ind

SUBJECT: Alternative Work Schedule for Intensive Care Unit Nurses and Para-professional Personnel

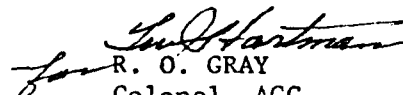
HQ, US Army Health Services Command, Ft Sam Houston, TX 78234 22 DEC 1983

TO: Commander, USA MEDDAC, Ft Campbell

1. Your request for approval of a test alternative work schedule (AWS) consisting of four 10-hour days per week is approved. This approval covers the ICU nursing unit and the test will terminate on 4 March 1984.
2. Computation of premium pay for the compressed work schedule is based on provisions of Section 6128 of PL 97-221. Current regulations apply for night pay and overtime hours in excess of the approved compressed work schedule.
3. Request that HSC be provided a copy of the post-test study or evaluation. HSC point of contact is Mr. Joe Gray, AV 471-6615. Prior to implementation, please verify with your servicing CPO that you have agreement with AFGE Local 2022 that the AWS is being established on a test basis and will end 4 March 1984.

FOR THE COMMANDER:

1 Incl
nc


R. O. GRAY
Colonel, AGC
Adjutant General

DEPARTMENT OF THE ARMY
HEADQUARTERS MEDICAL DEPARTMENT ACTIVITY
FORT CAMPBELL, KENTUCKY 42223



REPLY TO
ATTENTION OF.

HSMD-XO

1 December 1983

SUBJECT: Alternative Work Schedule for Intensive Care Unit Nurses and Para-professional Personnel

Commander
US Army Health Services Command
ATTN: HSPE-C
Fort Sam Houston, Texas 78234

1. An Alternate Work Schedule trial is proposed for an eight-week period beginning 9 January 1984. This trial will be conducted in the Intensive Care Unit, Colonel Florence A. Blanchfield Army Community Hospital, Fort Campbell, Kentucky. It is anticipated that this schedule will have a very positive impact on the morale of the Intensive Care Unit and will not negatively impact us in any way. We are prepared to monitor several aspects of productivity to ensure that it remains at the same level or increases appropriately.
2. In requesting approval of this alternative work schedule, I have inclosed an Information Paper which should be of value in evaluating our request.

ROBERT J. KREUTZMANN, M.D.
Colonel, MC
Commanding

1 Incl
as

INFORMATION PAPER

HSXD-NS

2 December 1983

SUBJECT: Alternative Work Schedule for Civil Service Nurses and Paraprofessional Staff Members, Colonel Florence A. Blanchfield Army Community Hospital, Fort Campbell, Kentucky

POC: MARY L. MESSERSCHMIDT, COL, ANC, Chief, Department of Nursing - 798-8034/8035

1. We would like to implement the proposed Alternative Work Schedule (AWS) from 3 January 1984 and continue through 3 March 1984.
2. The proposed schedule is to be worked as an official experimental program.
3. The nursing unit involved in the AWS trial is the ICU; the following numbers and types of staff will be involved:

		<u>Professional</u>	<u>Paraprofessional</u>
Civilian:	MAX	6	3
Military:	MAX	4	8

4. The ICU is an 8-bed multi-purpose unit whose major function is to care for those patients most in need of close observation due to physical illness and postoperative condition. Routine patient care activities as well as Physiologic/hemodynamic monitoring and ventilatory augmentation and emotional support are common functions of this unit. Twenty-four hour coverage is required on a daily basis.

5. The AWS trial is at the request of the nurse researcher; the purpose is to examine, in a scholarly manner, the answer to the question: "Does the implementation of Alternate Work Schedules have a positive effect on job satisfaction of nurses at Colonel Florence A. Blanchfield Army Community Hospital?" A recent study involving Army nurses worldwide revealed great dissatisfaction among nurses, specially relating to time scheduling and staffing. This study then is an attempt to discover if AWS is a practical solution to this dissatisfier. Current work schedules at Colonel Florence A. Blanchfield Army Community Hospital follow the traditional 40-hour (8-hour per day, 5-day) work week.

6. Time Accounting Procedure

a. The Alternate Work Schedule utilized will be:

Four, 10-hour days per week or (8-10 hour periods per two-week pay period). An example of this proposed Schedule is as follows:

	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN
Head Nurse	DO	1'	1'	1'	1'	1'	DO	DO	1'	1'	1'	1'	1'	DO	
1	DO	2	2	2	2	DO	DO	DO	DO	2	2	2	DO	DO	
2	3	3	3	3	3	DO	DO	DO	1	1	1	DO	DO	DO	
3	2	DO	DO	DO	1	2	2	2	DO	DO	DO	1	2	2	
4	DO	1	1	1	DO	DO	DO	3	3	3	3	3	DO	DO	
5 Part-time	DO	DO	DO	DO	DO	3	3	DO	DO	DO	DO	DO	3	3	
6 Part-time	1						1	1						1	
7	1	1	DO	DO	1	1	DO	DO	1	1	1	1	DO	DO	

1 = 0700-1730
1' = 0700-1530
2 = 1400-0030
3 = 2300-0930

b. Published time schedules will be adhered to. Exceptions will be only as authorized by the head nurse and only when essential. Attendance will be monitored by the nurse in charge and the Department of Nursing supervisor on a daily basis.

c. Overtime hours in excess of those which may already be occurring are not anticipated. In the event that overtime is necessary, it will be requested in advance, recorded as compensatory time worked, and paid back as compensatory time within 13 pay periods. The AWS trial is initiated subsequent to the provisions of PL 97-221.

7. As per conversation with Mr. Wallace, President of AFGE Local 2022, there is positive reaction to the proposed trial. An agreement has been reached between Labor and Management to facilitate the AWS on a trial basis for the purpose of this study.

2 December 1983

Page 3

8. Benefits Gained/Anticipated:

a. Efficiency of government operations

(1) Morale: An increase in morale is anticipated. Studies done in other civilian facilities have demonstrated positive results.

(2) Job Satisfaction: Previous studies have demonstrated increased job satisfaction due to AWS.

(3) Leave Usage: Since more days per week are available to the employee for personal use, leave usage, particularly use of sick leave, should decrease.

(4) Overtime Hours: Since the employees have more hours during which to complete assignments, overtime should not increase, but rather, has been shown in previous studies to decrease.

b. General Effects

More days off per pay period should lead to more time available for personal use and family activities.

9. No special problems are anticipated.

10. Adverse agency impact is not anticipated.

APPENDIX D
DATA PRODUCING INSTRUMENT

Revised Job Perception Scales

Think of your present job. How well does each of the following words or phrases describe your job? In the blank beside each word or phrase, put:

 Y if it describes your job

 N if it does NOT describe your job

 ? if you cannot decide

JOB PERCEPTIONS

 My present salary is satisfactory

 Even if I could make more money in another hospital nursing situation, I am more satisfied here because of the working conditions

 There is a good deal of teamwork and cooperation on this unit

 There is adequate time to discuss patient care problems with other hospital personnel

 The physicians at this facility generally understand and appreciate the nursing staff

 I have enough energy to do my job well

 I get a sense of satisfaction from the work I do in this job

 I am encouraged to participate in continuing education programs

 I am given adequate time in which to participate in continuing education programs

 There is enough time during my shift to complete my work assignment

 I am satisfied with the overall quality of care given here

 There is adequate time to teach patients and families

Revised Schedule Perception Scales

Think of your present schedule. How well does each of the following words or phrases describe your schedule? In the blank beside each word or phrase, put:

 Y if it describes your schedule

 N if it does NOT describe your schedule

 ? if you cannot decide

SCHEDULE PERCEPTIONS

 Work the shifts I want

 Can make plans based on it

 Too few staff

 Changes often

 Can't get the schedule I want

 Always short staffed

 I like it

 Shows favoritism

 Provides even staffing

 Get the days off I want

 I dislike it

 Usually enough staff

PERSONAL DATA

1. Length of time in nursing:

- 1) less than 1 year
- 2) 1 to 2 years
- 3) 3 to 5 years
- 4) 6 to 10 years
- 5) 11 to 15 years
- 6) 16 to 20 years
- 7) more than 20 years

2. Length of time in current job:

- 1) less than 12 months
- 2) 13 to 23 months
- 3) 2 to 4 years
- 4) 5 to 7 years
- 5) more than 7 years

3. My basic nursing education was:

- 1) Associate degree
- 2) Diploma
- 3) Baccalaureate degree

4. The highest level of education I achieved is:

- 1) High school or equivalent
- 2) Associate degree
- 3) Diploma
- 4) Baccalaureate degree
- 5) Masters degree
- 6) Other _____

5. I am:

- 1) Active military
- 2) Civilian

6. I work:

- 1) rotating shifts
- 2) a permanent shift

7. My age is:

- 1) less than 25 years
- 2) 25 to 30 years
- 3) 31 to 40 years
- 4) 41 to 50 years
- 5) 51 to 60 years
- 6) greater than 60 years

8. My sex is:

- 1) female
- 2) male

9. Marital status:

- 1) unmarried
- 2) married

10. Indicate if you have children in any of these age brackets:

- 1) 0 to 23 months
- 2) 2 to 5 years
- 3) 6 to 10 years
- 4) 11 years and older

APPENDIX E

LETTER AND QUESTIONNAIRE TO
DEPARTMENT OF NURSING PERSONNEL

14 September 1981

Dear Colleague,

A recent study done on nurse satisfaction indicates that time schedules are frequently a source of dissatisfaction among health care employees. It is my intent to discover whether or not alternative work schedules have a positive effect on employee satisfaction. In order to do this, I will be conducting a study involving several nursing units at Colonel Florence A. Blanchfield Army Community Hospital.

Alternate work schedules have been popular in the civilian community for years, hence there is much information available in the literature about alternate scheduling. However, to date, no studies have been done in military hospitals. I hope that this study will begin to fill this void.

By now you may be wondering what is meant by "Alternate Work Schedules". This term is used by Health Services Command to designate those work schedules which include other than the normal 8-hour day for 5 days per week. The Blanchfield Army Community Hospital (BACH) study will include both a 10-hour day and a 12-hour day. Both scheduling alternatives will include the normal 80-hour pay period. The trial period will last 12 weeks.

I would like to extend your help from the very beginning since this study is for and about you! Our nursing personnel are among our most valuable resources and job satisfaction is a primary goal. Attached to this letter is a short questionnaire. Included in this questionnaire are questions about how you personally feel about participating in an innovative work schedule study. Through your response I hope to gain insight into your questions about the study so that these questions can be answered to your satisfaction. Other comments about the study are also welcome.

Most people want to know at least two things: (1) How will this affect my pay? (2) What about time off?

First, there should be no significant change in pay. Alternate Work Schedules are established under PL 97-221, Federal Employees Flexible and Compressed Work Schedules Act of 1982.

Second, one of the advantages of Alternate Work Scheduling is that employees have more days off and enjoy the subsequent benefits of this fact.

Please answer the questions on the next page and return to the Head Nurse, Nursing Supervisor, or Department of Nursing. If you desire an immediate reply to any particular response, please put your name and ward number on the questionnaire and I will answer as soon as possible. The number on the survey is to ensure that all employees have had the chance to respond and to be sure responses are not lost.

Your participation is sincerely appreciated.

Thank You!

Mary Beth Johnson

MARY BETH JOHNSON
MAJ, ANC
Administrative Resident

QUESTIONNAIRE

1. If given the chance to participate in a study on the effect of Alternate Work Schedules on Employee Job Satisfaction, would you be:

- a. Willing to participate
- b. Wild about the idea - (When do we start?)
- c. No thanks

2. Do you have any questions about the study, the part you will perhaps have in it? Circle one.

Yes

No

If yes, please list your questions and/or comments.

You may reach me at ext. 8048 for any information you would like clarified.

THANK YOU!!

Mary Beth Johnson

MARY BETH JOHNSON

APPENDIX F

LETTER: MAJOR JAMES WARREN JESSUP, AND



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DEPARTMENT OF THE ARMY
U. S. ARMY MEDICAL DEPARTMENT ACTIVITY
FORT DIX, NEW JERSEY 08640

MAJ James W. Jessup
180 Grove Park
Fort Dix, N.J. 08640
16 Oct 83

MAJ Mary Beth Johnson
520 Hay Market Road
Clarkesville, TN 37043

Dear Mary Beth,

As you requested, I am sending you a copy of my Schedule Perception Scale for your use. The Scale that I am sending is a revision of my original one that shortens the questionnaire and removes some redundant questions. The reliability scores of the revised Scale are similar to the original one, especially if you use it as one entity -- rather than a composite of subscales as I at first designed it.

I've also enclosed copies of the scoring guide, the reliability scores and a write up of why I decided to revise the questionnaire. If I can find it I'll also enclose a copy of the reliability scores from my second use of the Scale (actually it's first use in the revised format). I'm also working on getting my entire thesis photocopied for you. I should be able to get it out in a week or so.

I am curious about how you found out about my study. When and where did you first hear of it? I was so surprised, pleasantly so, by your call that I didn't even think to ask you any questions about how you found my thesis. I haven't published anything yet, so I know it was not through the literature that you found me. I am more than happy to share my findings with you. I would also be interested in reading the results of your study. Please keep me in mind for a copy of your results.

If I can be of any further help, please feel free to call me, either at work - AUTOVON 944-3051/4297/4790 or Commercial (609) 562-etc, or at home - (609) 723-0483. I'm usually home until 1430 or so most days if that is more convenient for you.

Sincerely yours

Part IV: Revised JDI-type Schedule Perception Scale

Think of your present schedule. How well does each of the following words or phrases describe your schedule? In the blank beside each word or phrase, put

Y if it describes your schedule

N if it does NOT describe your schedule

? if you cannot decide

.....

SCHEDULE PERCEPTIONS

Y Work the shifts I want

Y Can make plans based on it

N Too few staff

N Changes often

N Can't get the schedule I want

N Always short staffed

Y I like it

N Shows favoritism

Y Provides even staffing

Y Get the days off I want

N I dislike it

Y Usually enough staff

POINT VALUES:

3 = Y on a Y question or N on an N question.

1 = ? on any question.

0 = N on a Y question or Y on an N question.

Scoring is in the satisfied direction. The higher the score the more satisfied the individual.

APPENDIX G

INFORMATION PACKET: INTENSIVE CARE UNIT



DEPARTMENT OF THE ARMY
HEADQUARTERS MEDICAL DEPARTMENT ACTIVITY
FORT CAMPBELL, KENTUCKY 42223

REPLY TO
ATTENTION OF:

December 7, 1983

Executive Officer

SUBJECT: Alternate Work Schedules

Intensive Care Unit Staff
US Army Medical Department Activity
Fort Campbell, Kentucky 42223

Dear Colleague:

Congratulations! This unit has been selected to participate in a trend-setting occasion--a study involving the implementation of Alternate Work Schedules, specifically, a 10-hour shift, 80 hours per pay period--an average of 4 days per week. This is the only military hospital to ever attempt such a feat! Other hospitals have gone to 12 hour days, but none have tried 10 hour days.

The purpose of the study is to answer the question: "does the implementation of Alternate Work Schedules increase job satisfaction in nursing personnel". It has been shown that perceptions about time schedules are related to job satisfaction. Response to my initial questionnaire was positive and I hope that you will enjoy participation in the study. There may be some who are not wild about the idea. I need your input too! This is such a new concept for military hospitals that there is no data on whether or not people will like it or if it will work. This is the only way to find out. If you don't think you'll like it, I need your participation even more. This is everyone's chance to say, I love it or I hate it. The local union is very interested in your reaction to the trial, as are the folks at Health Services Command, the Army Nurse Corps Career Activity Office, as well as the chiefs here. This is history folks, so I ask your support in this endeavor. Ten months of planning has gone into this study...now I need two months of your time and some personal reactions. Remember, the purpose of this study is to benefit you! You are our most important asset.

A copy of the Alternate Work Schedule Plan is located on the unit for your information. Many of your questions should be covered in it. Other questions will be answered following this letter.

I am very excited about this study, as I hope you will be. It's not often we get the opportunity to try something first.

Thank you very much for your cooperation and support!

Sincerely,

Mary Beth Johnson

Mary Beth Johnson
Major, Army Nurse Corps
United States Army-Baylor Program
Health Care Administration

QUESTIONS: ANSWERS

1. Q: What hours would the shifts operate?

- A: (1) 0700-1730
(2) 1330-0030
(3) 2300-0930

This allows overlap for some busy times of the day.

2. Q: How many days a week would you work?

- A: Typically 4-5 days per week. Remember, you may only work 80 hours per 2-week period. Therefore, you must have 6 days off for each 8 days worked.

3. Q: What would happen with pay on holidays?

- A: This is essentially unchanged (see AWS Plan). The only difference is that the holiday is 10 hours rather than 8.

4. Q: May we choose the shift?

- A: Time schedules are being prepared based on requests already made in the time book. Requests are certainly allowed but must be made in a timely manner.

5. Q: What about part-time folks?

- A: The two part-time nurses will split the one full-time equivalent and work two days each.

6. Q: When do we start?!

- A: The new schedule will start at 0700 hours on 8 January 1984 and run for two weeks.

7. Q: I need to work weekends for school. Will AWS accommodate this?

- A: You should notice an improvement in that you will have three days off per week rather than two. That gives you more time off to do personal things.

8. Q: What are some other advantages?

- A: (1) save money on gas since one trip to and from work is eliminated
(2) more off duty time
(3) other hospitals report that job satisfaction seems increased
(4) communication with other shifts increases
(5) more time to complete tasks during normal shift
(6) time for team conferences, written care plans, inservice education
(7) better arrangement of staff to provide more nursing personnel during peak periods
(8) provides a means of scheduling more days off together for the staff and avoiding long work stretches of six and seven days

9. Q: What do I have to do in the study?

A: This is covered in more detail in the consent form and in the Alternate Work Schedule Plan. Initially (December, 1983), you will fill out a short questionnaire about your present job situation. In January, 1984 the Alternate Work Schedule will be in. In March, you will be asked to complete another questionnaire and revert to eight-hour days. In May, you will again be asked to respond to a questionnaire. The questionnaires are short and not time-consuming to complete.

Headquarters of the Army
Headquarters Medical Department Activity
Fort Campbell, Kentucky

Alternative Work Schedule (AWS) Plan
Compressed Work Week

1. PURPOSE. This plan establishes policies, assigns responsibilities, and prescribes procedures for establishing a two-month trial compressed work week in the Intensive Care Unit, Colonel Florence A. Blanchfield Army Community Hospital, in accordance with the provisions of the Federal Employees Flexible and Compressed Work Schedule Act of 1982 (Public Law 97-221).

2. OBJECTIVES.

a. The objectives of the AWS Plan is to provide benefits to the employees. Work schedules should be established so that each organization has the maximum employee coverage possible, during as wide a band as possible, taking into consideration mission requirements and available manpower.

b. Employees can accommodate personal appointments without using leave and can shape their schedules to enable them to spend more time with their families and in other pursuits.

3. APPLICABILITY. This memorandum applies to the following personnel within Headquarters, U.S. Army Health Services Command who work in the Intensive Care Unit, Colonel Florence A. Blanchfield Army Community Hospital:

CPT Susan Conner

CPT Susan Bradley

CPT Jack Johnston

Mrs. Ava Adams

Mrs. Cindy Drake

Mrs. Sylvia Nolde

Mrs. Zora Slaughter

Mrs. Marlene Taylor

Mrs. Frances Wall

SP6 Michael Beshears

SP4 Mary Jackson

SP4 Mark Hooper

SP5 Virginia Morgan

SP4 Brenda Stripling

PFC Karleen Jackson

PFC Barbara Smith

PFC Michael Mears

Mr. Roosevelt Jefferson

Mr. Jimmie Melton

Mrs. Evelyn Roberts

Mrs. Edna Gafford

4. Definitions.

a. Compressed Work Schedule: A work schedule comprised of a ten-hour day, 80 hours per pay period. All work performed by an employee within this basic work requirement is considered regularly scheduled work for premium pay and hours of duty purposes.

b. Credit Time: Will not be applied during this trial period.

c. Model Work Schedules.

	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
Head Nurse	DO	1'	1'	1'	1'	1'	DO	DO	1'	1'	1'	1'	1'	DO
1	DO	2	2	2	2	DO	DO	DO	DO	2	2	2	DO	DO
2	3	3	3	3	3	DO	DO	DO	1	1	1	DO	DO	DO
3	2	DO	DO	DO	1	2	2	2	DO	DO	DO	1	2	2
4	DO	1	1	1	DO	DO	DO	3	3	3	3	3	DO	DO
5 Part-time	DO	DO	DO	DO	DO	3	3	DO	DO	DO	DO	DO	3	3
6 Part-time	1						1	1						1
7	1	1	DO	DO	1	1	DO	DO	1	1	1	1	DO	DO

Code: 1 = 0700-1730
 1' = 0700-1530
 2 = 1400-0030
 3 = 2300-0930

SUN	MON	TUE	WED	THU	FRI	SAT
X	X	1	1	X	1	1
1	1	X	X	1	1	X
X	X	1	1	X	2	2
2	2	X	2	2	X	X
X	X	3	3	3	X	3
3	3	X	X	3	3	X

(2)*

Code: 1 = 7:00 A.M. to 5:30 P.M.
 2 = 1:00 P.M. to 11:00 P.M.
 3 = 9:00 P.M. to 7:00 A.M.
 X = Days off

* This shift was not covered in the original sample.

5. POLICY.

a. Compressed Work Schedule is authorized to improve the efficiency of operation, increase productivity, improve morale, decrease/eliminate tardiness, reduce excessive rush-hour traffic, and enhance employee leave utilization.

b. Except as described herein, Compressed Work Schedule does not alter other applicable laws and regulations concerning the utilization of leave, overtime/compensatory time, or the rights of employees.

c. Shifts.

1	=	0700-1730
1	=	0700-1530
2	=	1400-0030
3	=	2300-0930

d. Deviation from the established Compressed Work Schedule may be approved by the supervisor upon request from an employee at least one week prior to the posting of the monthly schedule.

e. Employees are permitted to work up to a maximum of ten hours per day and must account for at least 80 hours per pay period.

6. RESPONSIBILITIES.

a. The Head Nurse, Intensive Care Unit will:

(1) Continue record-keeping procedures which include, as a minimum, schedules in use and number of employees covered by the Alternate Work Schedule. Respond to requests for data as required.

(2) Continue present method of accounting for time worked in accordance with applicable regulations.

(3) Formulate monthly time schedules.

b. Supervisors will approve or disapprove proposed work schedules, taking into account mission requirements.

c. Employees will comply with scheduled conferences, meetings, training sessions, TDI, security duties, and other known requirements for his/her presence.

7. PROCEDURES.

a. The head nurse will submit a proposed monthly work schedule for approval by the immediate supervisor. Thereafter, any proposed change to the monthly schedule will be submitted by the employee by Monday prior to the beginning of a new monthly schedule.

b. In instances where unforeseen conferences, meetings, or other work commitments arise that require the presence of an employee, supervisors should coordinate with the employee in revising the work schedule if necessary. If a revision cannot be made due to time limitation and attendance by the employee is considered essential, overtime or compensatory time may be employed in accordance with applicable regulations.

c. If excused absence is granted because of hazardous weather or other emergency conditions, the amount of excused absence shall be based on the employee's approved work schedule in effect for the period covered by the excused absence. For example, if a delayed opening until 1100 hours is required, an employee who normally reports for work at 0700 hours will be excused for four hours.

d. Holiday Rules for Irregular Hours: A full-time employee on a 4/40 work schedule who is relieved or prevented from working on a day designated as a holiday is entitled to pay with respect to that day for ten hours. In accordance with AR 30-105:

(1) When a holiday falls on a workday, the workday will be observed as the holiday.

(2) When a holiday falls on a Sunday and the employee's workweek does not include Sunday, the next workday will be the holiday.

(3) When the holiday falls on a day that is the employee's off-day in place of Sunday (first off-day), the next workday will be the holiday. When the holiday falls on the employee's second off-day, the preceding workday will be the holiday.

(4) The occurrence of holidays may not affect the designation of the basic workweek, except that when a holiday occurs on a Monday, such holiday may be scheduled as a day within the basis workweek for BA employees who have a normal basic workweek of Tuesday through Saturday. The succeeding Tuesday will be a nonworkday. This means that Sunday and Tuesday will be nonworkdays and Monday, a workday, will be treated in the usual manner applicable to a holiday that falls on a workday.

e. Part-time employees. Eligible part-time employees who cannot work on a regularly scheduled workday because of a holiday observance will receive base pay for the hours of work scheduled.

f. For a part-time employee, if a holiday falls on a day during his/her compressed work schedule, the employee is entitled to pay for the number of hours he/she was scheduled to work on that day not to exceed ten hours. A part-time employee is not entitled to an "in lieu of" holiday if a holiday falls on a nonworkday.

g. Time off during an employee's basic work requirements must be charged to the appropriate leave category unless the employee is authorized the use of compensatory time, or excused absence. A leave charge is for the number of hours which an employee was scheduled to work on that day. For example, if

the employee has a work schedule of ten hours and reports sick for the day, the employee will be charged ten hours sick leave.

CONSENT TO PARTICIPATE IN AWS TRIAL

Colonel Florence A. Blanchfield Army Community Hospital

I _____ agree to participate in the Alternate Work Schedule study at Colonel Florence A. Blanchfield Army Community Hospital during the period 5 December 1983 through May 1984. I understand that participation is voluntary and that the following requirements are involved once I agree to participate.

1. Complete pre-test relating to job satisfaction during the month of December 1983.
2. Adhere to ten-hour Alternate Work Schedule as published by the head nurse during the period 9 January 1984 through 3 March 1984. (8 weeks)
3. Revert to previous eight-hour day schedule on 4 March 1984.
4. Complete post-test survey 5-16 March 1984.
5. Complete additional post-test survey between 1-4 May 1984.

Additionally, I understand that: (1) the purpose of this study is to determine whether or not the implementation of AWS has a positive effect on job satisfaction of Department of Nursing personnel; (2) my participation in this study is greatly appreciated; (3) only Major Mary Beth Johnson will have access to responses in the Questionnaire and that all data will be destroyed at the completion of this project, not later than 1 September 1984; (4) all data will be presented as group data; (5) I will not be identified in any way; and (6) a copy of this project will be on file at the Academy of Health Sciences, Fort Sam Houston, Texas.

Signature

Printed Name and Position

APPENDIX H

INFORMATION PACKET: LABOR AND DELIVERY UNIT



DEPARTMENT OF THE ARMY
HEADQUARTERS MEDICAL DEPARTMENT ACTIVITY
FORT CAMPBELL, KENTUCKY 42223

REPLY TO
ATTENTION OF

8 December 1963

Executive Officer

SUBJECT: Alternate Work Schedule

Labor and Delivery Staff
US Army Medical Department Activity
Fort Campbell, Kentucky 42223

Dear Colleagues:

You have been selected to participate in a historic event! I am conducting a study on Alternate Work Schedules, specifically the compressed work week--a ten hour day, eighty hours per pay period.

The 4/40 work week is not in effect at any military hospital under Health Services Command. There is no data to suggest whether or not this will work in the military setting. The purpose of the study is to determine whether or not the implementation of the compressed work week will increase job satisfaction in nurses. The idea that work schedules are related to job satisfaction is well documented in the literature.

Your role in the study is to serve as the "control" unit. This means that identical observations will be made of your unit, as well as of the trial unit. However, you will continue to work the normal eight hour work day. I will ask that you fill out a series of short questionnaires spaced several months apart. Additionally, I will place a log book on the unit for any spontaneous comments you care to make about things which may affect your job satisfaction. These will be the only active parts of your participation and will in no way jeopardize your privacy. I will be the only one with access to your answers. You will not be identified in any way. Data will be reported as group data.

Thank you for your participation and support.

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